



## SECTION 201

### CLEARING AND GRUBBING

**201.1 Description.** This work shall consist of clearing, grubbing, removing and disposing of items, debris and other objectionable matter from within the limits of right of way and easement areas, except vegetation designated to remain or to be selectively treated.

#### **201.2 Construction Requirements.**

**201.2.1 General.** The engineer will be responsible for establishing right of way lines and construction limits and designating all trees, shrubs, plants and other objects that are to remain. All designated items shall be preserved. Any damage to natural terrain, vegetation or objects designated to remain shall be repaired or replaced, as determined by the engineer, at the contractor's expense.

**201.2.2 Clearing and Grubbing.** Unless otherwise specified in the contract documents, the entire length of the project shall be cleared and grubbed to the limits and requirements specified. Clearing and grubbing shall include removal of all trees, stumps, roots and any objectionable matter resting on or protruding through the surface of the original ground, except for those items designated to remain.

**201.2.2.1 Clearing.** The area for clearing shall be within the following limits:

(a) Highway construction areas on the right of way or its easements, including structures, frontage roads, streets, ramps, approaches, ditches, channels and all other access roads, connections and incidental items that are to be constructed. These areas shall extend 10 feet (3 m) outside of construction lines or to the right of way limits if less than 10 feet (3 m).

(b) Material sites within the right of way or its easements.

(c) Areas enclosed by interchange loops and ramps.

(d) Site distance areas for intersecting routes.

**201.2.2.2 Limits of Grubbing.** Within the limits of the cut areas, grubbing shall be performed to a minimum depth of 18 inches (450 mm) below the finished earth grade of roadways, ditches, channels, borrows and structures. The areas below the natural ground surface, except in embankment areas where the finished earth subgrade elevation is 4 feet (1.2 m) or more above the natural ground, shall be grubbed to a depth necessary to remove all stumps, roots, buried logs and other objectionable material. In embankment areas, undisturbed stumps and roots extending no more than 6 inches (150 mm) above the ground line may remain, provided they are a minimum of 4 feet (1.2 m) below the finished earth grade. Except in areas to be excavated, holes created by removals shall be backfilled with suitable material and compacted to the approximate density of the adjacent area.

**201.2.2.3 Selective Clearing and Grubbing.** All areas outside the limits designated for clearing and grubbing, but on the right of way, shall be free of unsightly vegetation, debris and

other objectionable matter. In lieu of grubbing, undisturbed stumps outside the slope stake limits and in mowable areas may be cut to a maximum height of 3 inches (75 mm) above the ground. Low hanging, unsound or unsightly branches on trees or shrubs designated to remain shall be removed as directed by the engineer.

**201.2.2.4 Tree Clearing Time Restriction.** In counties north of the Missouri River, the contractor shall not clear trees which are considered suitable roosts for Indiana bats between April 1 and September 30, except as approved by the engineer. When clearing operations must be conducted during this restricted time period, the contractor shall notify the engineer at least 14 days prior to conducting the clearing so arrangements can be made to inspect each suitable tree to ensure Indiana bats are not present. Standing dead trees with loose or peeling bark and living shagbark hickories are considered suitable roosts when the trees are greater than 9 inches (225 mm) in diameter at 4 feet (1.2 m) above the ground.

**201.2.3 Scalping.** The contractor shall scalp all areas where excavation or embankment is to be performed, except mowed or burned over sod may remain where the embankment to be constructed is at least 4 feet (1.2 m) above natural ground. Scalping shall include the removal of surface material such as sod, grass, residue of agricultural crops, sawdust and any other vegetative matter without removing more earth than is necessary.

**201.2.4 National Forest Land.** Before beginning work on a highway to be constructed over national forest land, the contractor shall obtain information from the forest ranger in charge as to the rules and regulations covering construction procedures. The contractor shall cut all merchantable timber into standard log lengths of 12 feet (3.7 m) or more, clean it of all twigs, limbs and tops, and pile the logs as directed by the engineer. Merchantable timber will be considered any timber from which saw logs, pulpwood, posts, poles, ties or cordwood can be made. A burning permit shall be secured from the forest ranger in charge and the ranger shall be notified by the contractor before any fires are set. A zone extending 100 feet (30 m) each side from the centerline of the highway is considered to be a scenic zone and no area beyond construction limits shall be marred or defaced by the contractor's equipment or construction procedures.

**201.2.5 Removal and Disposal of Material.** The contractor shall dispose of all trees, stumps, brush, roots and all other objectionable matter removed in the clearing and grubbing process. Removal and disposal of all material shall be done in accordance with applicable laws, ordinances, rules and regulations.

**201.2.5.1** Open burning in incorporated areas will be allowed only under a permit or waiver from MDNR. Open burning of tree trunks, tree limbs, and natural vegetation from clearing operations is allowable in outstate areas as defined in MDNR regulations. The contractor shall obtain all necessary permits and approvals before open burning is initiated and shall comply with permit conditions, MDNR regulations, and all laws in accordance with [Sec 107.1](#). A person shall be present during all burning. Measures shall be taken to ensure that structures or vegetation on adjacent property, or items designated to remain on the right of way, shall not be jeopardized. Fires set for the purpose of training fire fighters and industrial employees in fire fighting methods may be allowable after coordination with MDNR or local fire departments, and shall be in strict accordance with National Fire Protection Association (NFPA) standards.

**201.2.5.2** Burial of stumps and debris will not be permitted on the right of way. Products of clearing and grubbing may be removed from the right of way and disposed out of sight from the roadway provided there is no discrepancy with governing regulations for the wasted material. An acceptable written agreement with the property owner shall be submitted by the contractor prior to the disposal of material on that property.

**201.2.5.3** The products of scalping shall be deposited at the toe of embankments where such

areas are available within the limits of the roadway balance affected. If such areas are not available, the products shall be neatly and uniformly deposited on the right of way in a manner that no drainage will be blocked.

**201.2.5.4** Except in national forest areas, all timber that has not been removed from the right of way prior to construction and is not designated to remain shall become the property of the contractor.

**201.2.6** The contractor shall scalp all areas where excavation or embankment is to be made, except that mowed or burned over sod need not be removed where the embankment to be constructed is 4 feet (1.2 m) high or more. Scalping shall include the removal of material such as sod, grass, residue of agricultural crops, sawdust and decayed vegetative matter from the surface of the ground without removing more earth than is necessary. The products of scalping shall be deposited at the toe of embankments where such areas are available within the limits of the roadway balance affected. If such areas are not available, the products shall be neatly and uniformly deposited on the right of way in such manner that no drainage will be blocked.

**201.2.7 Tree Clearing Time Restriction.** In counties north of the Missouri River, the contractor shall not clear trees which are considered suitable roosts for Indiana bats between April 1 and September 30, except as approved by the engineer. When clearing operations must be conducted during this restricted time period, the contractor shall notify the engineer at least 14 days prior to conducting the clearing so arrangements can be made to inspect each suitable tree to ensure Indiana bats are not present. Standing dead trees with loose or peeling bark and living shagbark hickories are considered suitable roosts when the trees are greater than 9 inches (225 mm) in diameter at 4 feet (1.2 m) above the ground.

**201.3 Method of Measurement.** The work provided herein will not be measured for payment, but will be considered a lump sum unit. The following exceptions will be made on a measured quantity basis:

(a) An authorized change in the line or grade, or appreciable deviations in the original ground elevations in accordance with [Sec 203.6.1](#), significantly alters the original construction limits of the contract.

(b) Authorized alterations or corrections to the plans provide additional work outside the original construction limits of the contract and will materially affect the final payment quantity.

**201.3.1** If payment for additional work is required, a combined measurement of clearing and grubbing will be made on an area basis to the nearest 1/10 acre (0.05 hectare). An acre (hectare) will consist of 87.12 (160) units, each unit being a rectangular area 50 feet (12.5 m) long and 10 feet (5 m) wide.

**201.3.2** The total area of the right of way, except that part secured for channel changes, inlet or outlet easements and borrow areas will be laid out in units beginning at the centerline of the highway with corners at whole or half stations and extending outward until all of the right of way has been included. The total area of the right of way secured for channel changes, inlet or outlet easements, or borrow areas will be laid out in units in the same manner from longitudinal base lines run or designated for these areas.

**201.3.3** Clearing and grubbing will be considered as one item. If either clearing or grubbing is required for a unit, the entire unit will be counted for measurement. Areas of mowing or scalping, small trees or brush 5 feet (1.5 m) high or less, and all weeds, cornstalks and similar vegetation regardless of height, and the trimming of branches on trees and shrubs designated

to remain, will not be measured and will be considered incidental to other required work. Only stumps 3 inches (75 mm) or more in diameter and 6 inches (150 mm) or more above the ground surface in areas where grubbing is required will be considered in the measurement of grubbing.

**201.3.4** If any clearing or grubbing is performed within any unit, the entire area of that unit, except in the case of overlaps, will be included in the measurement. If individual trees or stumps cause the overlapping of units as laid out, only one unit of clearing and grubbing, as applicable, will be allowed. If a fractional unit occurs as a result of measurement or of overlap, the fractional unit will be counted as one unit. If the boundary line of any unit intersects a single tree or stump, counting of another applicable unit will not be made if there is any clearing and grubbing to be paid for in the adjacent unit.

#### **201.4 Basis of Payment.**

**201.4.1** Clearing and grubbing will be paid for at the contract lump sum price and will be considered full compensation for all labor, materials and equipment to perform the described work.

**201.4.2** If a lump sum unit for clearing and grubbing is not included in the contract, any necessary clearing and grubbing, including scalping, selective clearing and the removal and disposal of all the resulting material required within the contract items specified shall be considered incidental to the contract and additional compensation will not be made.

**201.4.3** If clearing and grubbing is required outside the initial contract work payment for that clearing and grubbing will be made per acre (hectare) at the fixed unit price specified in [Sec 109.14](#).